AMENDMENTS TO THE CLAIMS

Claim 1 (Canceled)

Claim 2 (Currently Amended): A method for producing a feed material for molten metal production, the method comprising the steps of:

Do not enter

heating a mixture containing zinc, a metal oxide-containing material and biomass to carbonize the biomass in the mixture in a heating furnace, ~~wherein~~ where the heating furnace is substantially isolated from oxygen;

charging the heated mixture in a reducing furnace;

reducing the metal oxide-containing material contained in the mixture in the reducing furnace;

separating the zinc from the mixture in the reducing furnace; and

obtaining the feed material ~~comprising~~ , where the feed material comprises a mixture containing a carbide of the biomass and the metal oxide-containing material ~~wherein~~ , and the metal oxide-containing material comprises metal oxide, partially or entirely reduced to a reduced metal.

Claim 3 (Original): The method for producing a feed material for molten metal production according to claim 2, wherein the atmospheric temperature in the reducing furnace is 1250° C to 1450° C.

Claim 4 (Original): The method for producing a feed material for molten metal production according to claim 2, further comprising a step of agglomerating the mixture between the step of carbonizing the biomass contained in the mixture and the step of charging the mixture in the reducing furnace.

Claim 5 (Currently Amended): The method for producing a feed material for molten metal production according to claim 2, further comprising a step of melting the mixture in the reducing furnace by heating in the reducing furnace after the step of reducing the metal oxide-containing material contained in the mixture in the reducing furnace.

Claims 6-10 (Canceled)

Claim 11 (Original): The method for producing a feed material for molten metal production according to claim 2, wherein the heating temperature in the heating furnace is 700° C or more.

Claim 12 (Original): A method for producing a molten metal, comprising the steps of:

charging a feed material for molten metal production obtained by the method according to claim 2 in a melting furnace; and

melting the feed material in the melting furnace.

Claim 13 (Original): The method for producing a molten metal according to claim 12, further comprising a step of agglomerating the feed material for molten metal production before the step of charging the feed material in the melting furnace.

Claim 14 (Original): The method for producing a feed material for molten metal production according to claim 2, wherein the biomass is wood biomass.

Claims 15-16 (Canceled)

Claim 17 (Previously Presented): The method for producing a feed material for molten metal production according to claim 2, wherein the metal oxide-containing material is an iron oxide-containing material.

Claim 18 (Canceled)

SUPPORT FOR THE AMENDMENT

This Amendment cancels Claims 1, 6-10, 15-16 and 18; and amends Claims 2 and 5. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 2 is found in the specification at page 13, line 17 to page 14, line 21. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 2-5, 11-14 and 17 will be pending in this application. Claim 2 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention provides a method for producing a feed material for molten metal production. The method uses biomass to reduce a metal oxide-containing material containing zinc and form the feed material. By removing the zinc from the feed material before the feed material is fed into a melting furnace, contamination of the melting furnace with zinc is avoided. Specification at page 5, lines 16-20; page 6, lines 8-16; page 14, lines 1-7 and 13-16.

Claims 1-18 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 4,569,691 ("Fichte"). In addition, Claims 1-18 are rejected under 35 U.S.C. § 103(a) over DE 35 46 261 A1 ("Greul").

Fichte discloses a method of making ferroboron or ferroborosilicon alloys in an electrical furnace wherein the charge contains iron oxide, boron oxide, and a carbon carrier of wood chips or particles which are carbonized to wood charcoal during the process. Fichte at abstract.

Greul discloses reducing ore using thermoplastic biomass. Greul at abstract.

However, Fichte and Greul are silent about zinc and fail to suggest the independent Claim 2 limitation of "separating the zinc from the mixture in the reducing furnace".

Thus, the prior art rejections should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Corwin Paul Umbach

Corwin P. Umbach, Ph.D.
Registration No. 40,211

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 06/04)